

FIG. 1
(PRIOR ART)

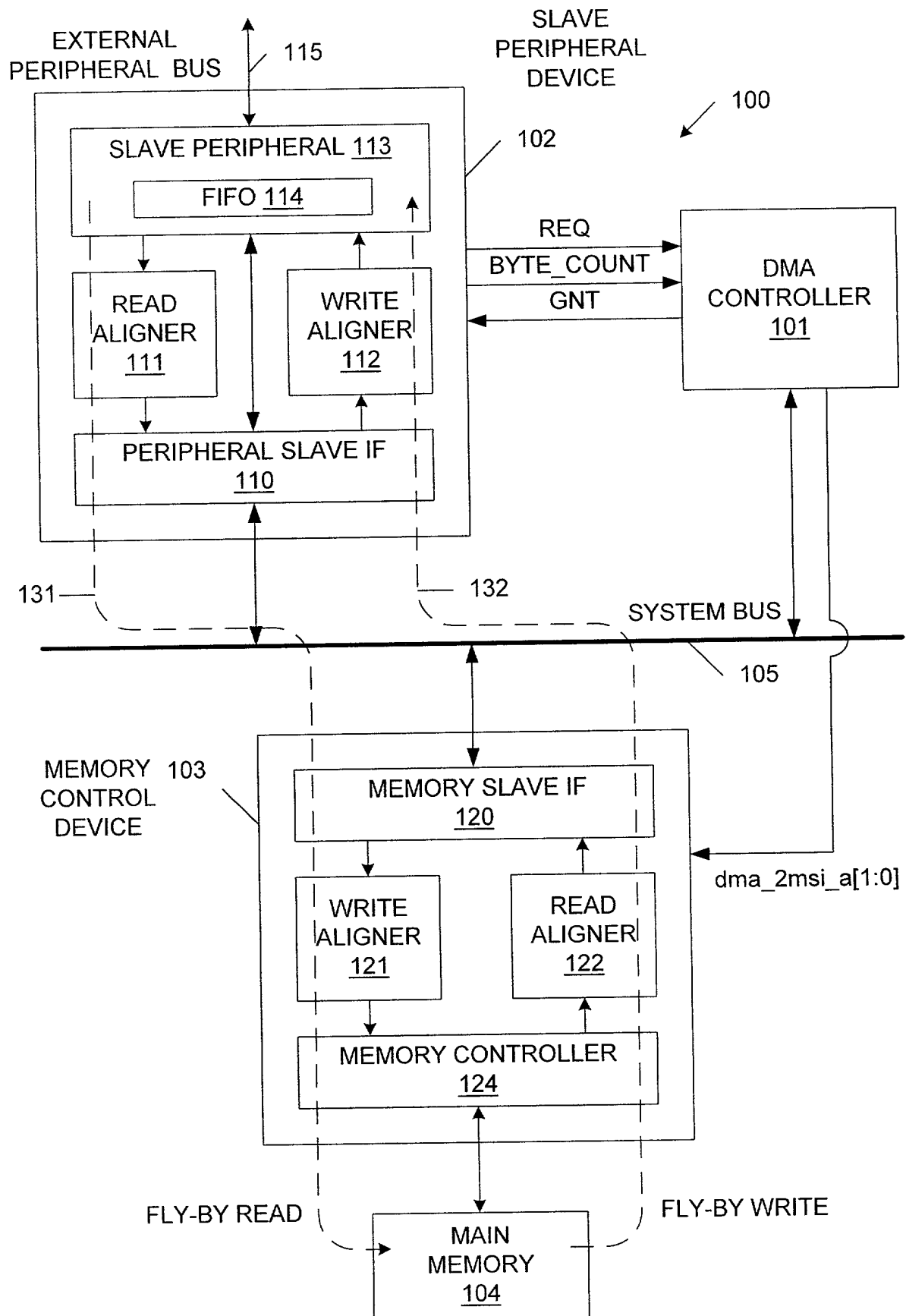


FIG. 2

| DATA IN FIFO 114 | | | | | 114 |
|------------------|----|----|----|----|-----|
| | 00 | 01 | 10 | 11 | |
| 201 | x | x | A | B | ↙ |
| 202 | C | D | E | F | |
| 203 | G | H | I | J | |
| 204 | K | L | M | N | |
| 205 | O | P | Q | R | |
| 206 | S | T | U | V | |
| 207 | W | X | Y | Z | |
| ⋮ | | | | | |

FIG. 3

| DATA ON SYSTEM BUS 105 | | | | | 105 |
|------------------------|----|----|----|----|-----|
| | 00 | 01 | 10 | 11 | |
| 301 | A | B | C | D | ↙ |
| 302 | E | F | G | H | |
| 303 | I | J | K | L | |
| 304 | M | N | O | P | |
| 305 | Q | R | S | T | |
| 306 | U | V | W | X | |
| 307 | Y | Z | x | x | |

FIG. 4

| DATA TO MEMORY 104 | | | | | 104 |
|--------------------|----|----|----|----|-----|
| | 00 | 01 | 10 | 11 | |
| 401 | x | x | x | A | ↙ |
| 402 | B | C | D | E | |
| 403 | F | G | H | I | |
| 404 | J | K | L | M | |
| 405 | N | O | P | Q | |
| 406 | R | S | T | U | |
| 407 | V | W | X | Y | |
| 408 | Z | x | x | x | |

FIG. 5

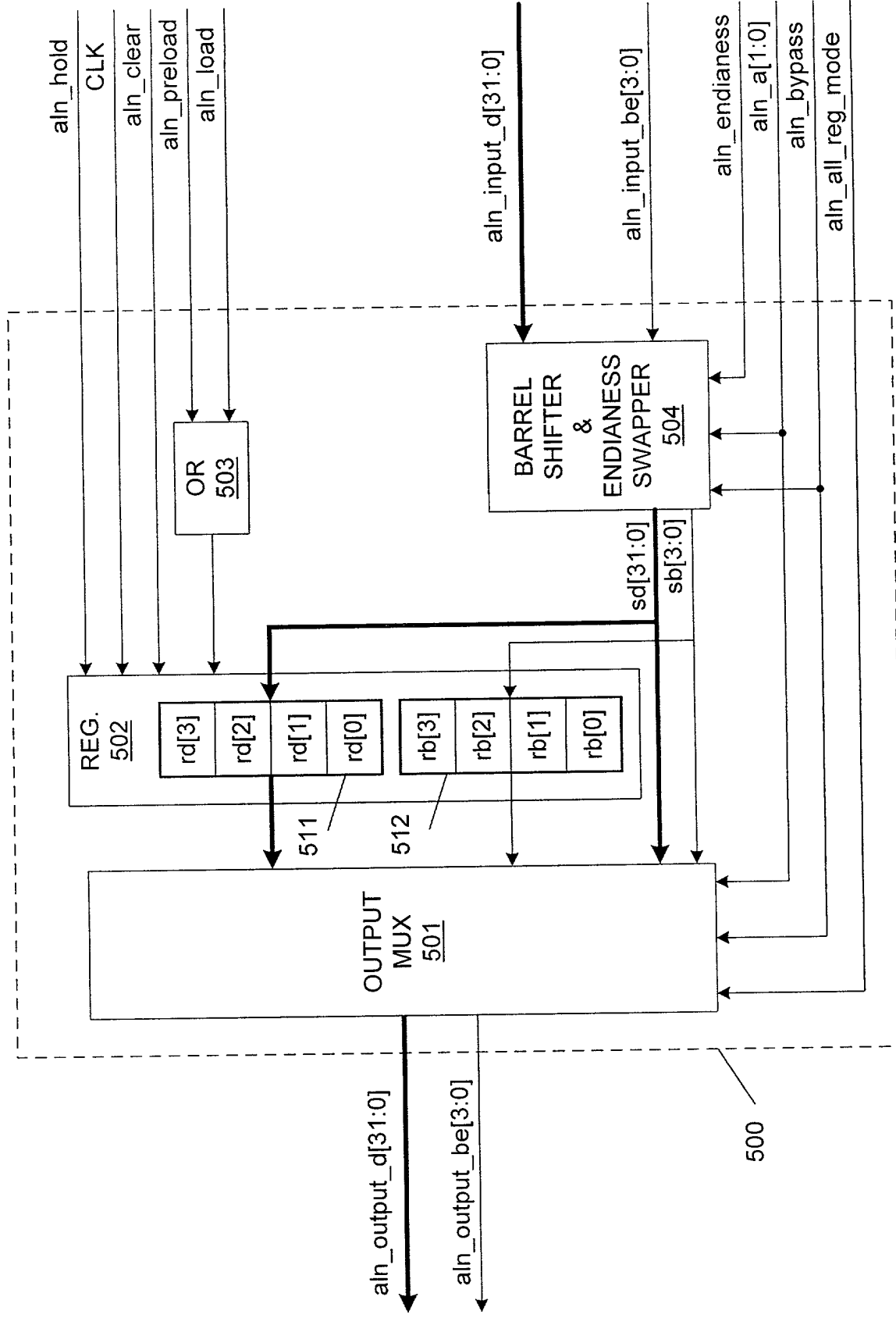


FIG. 6

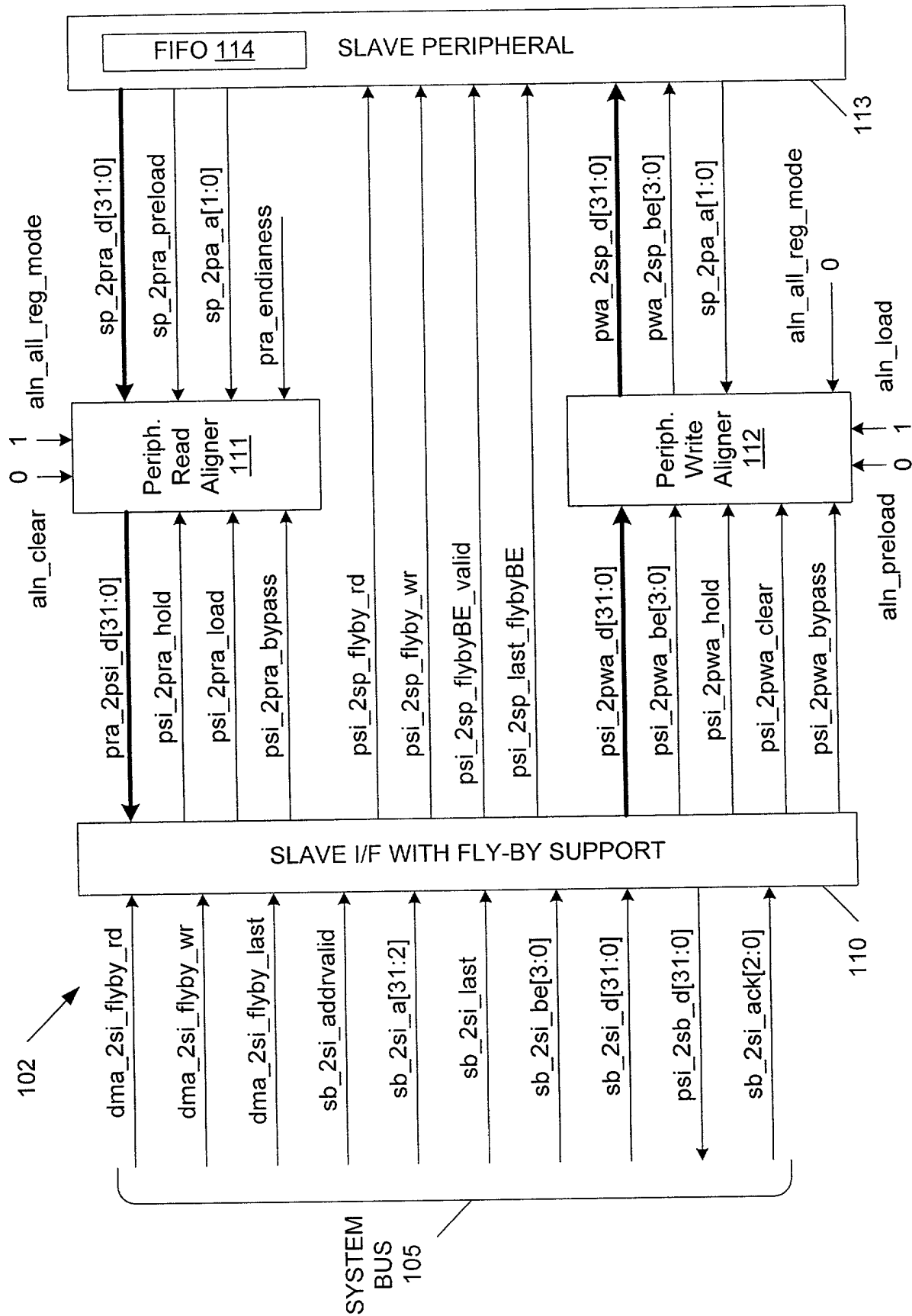


FIG. 7

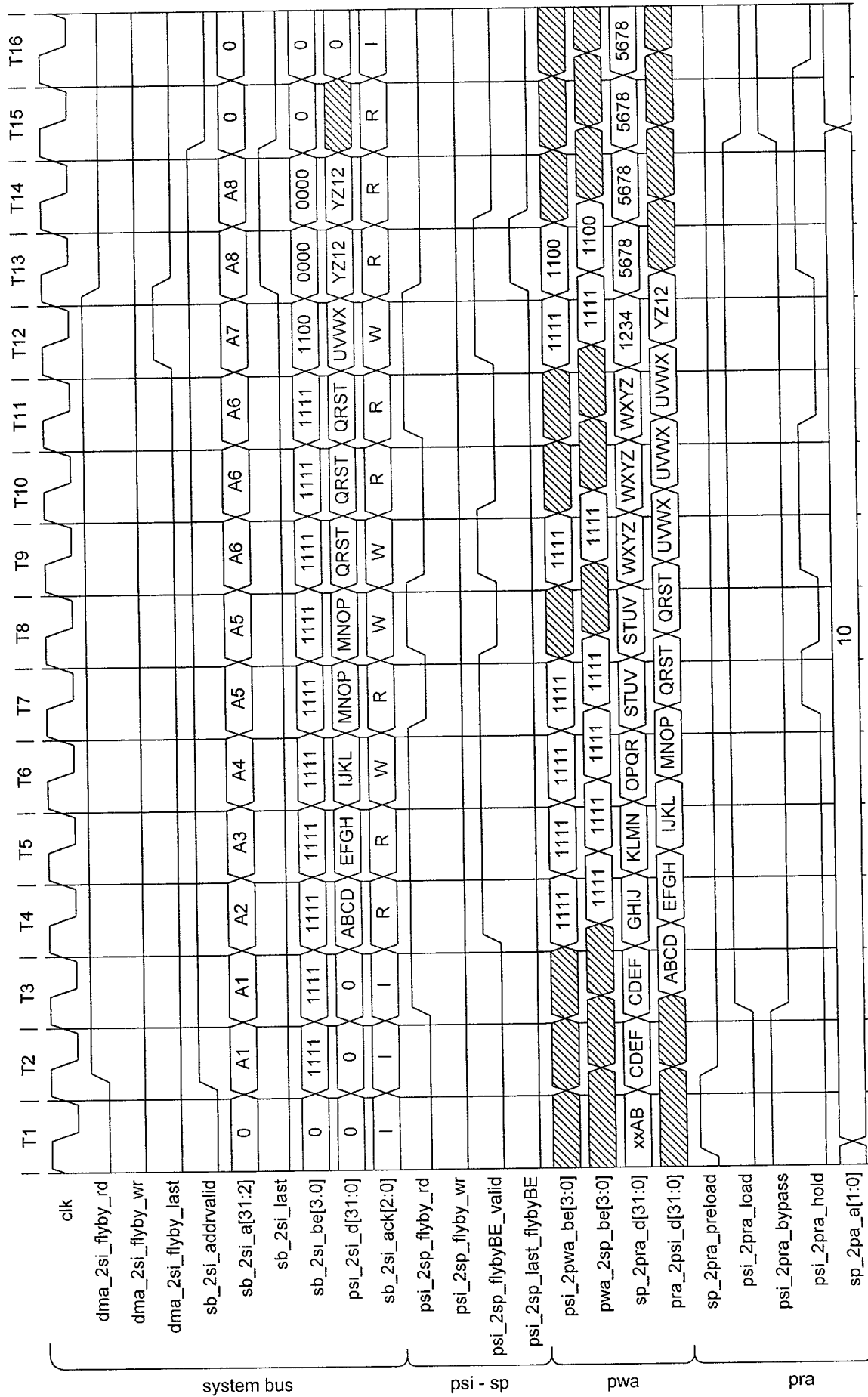


FIG. 8

psi_2pwa_hold = 0

psi_2pwa_clear = 1

psi_2pwa_bypass = 1

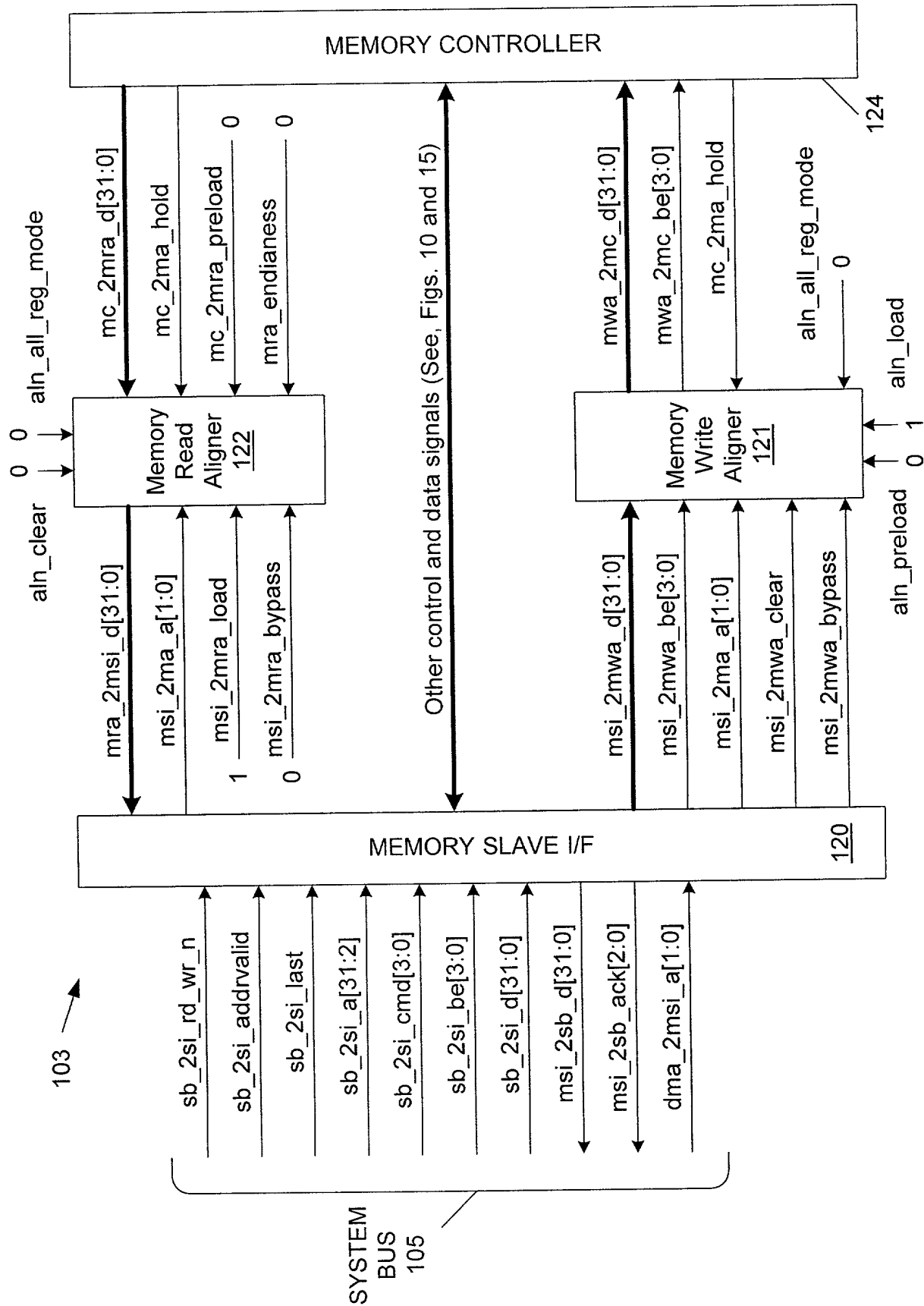
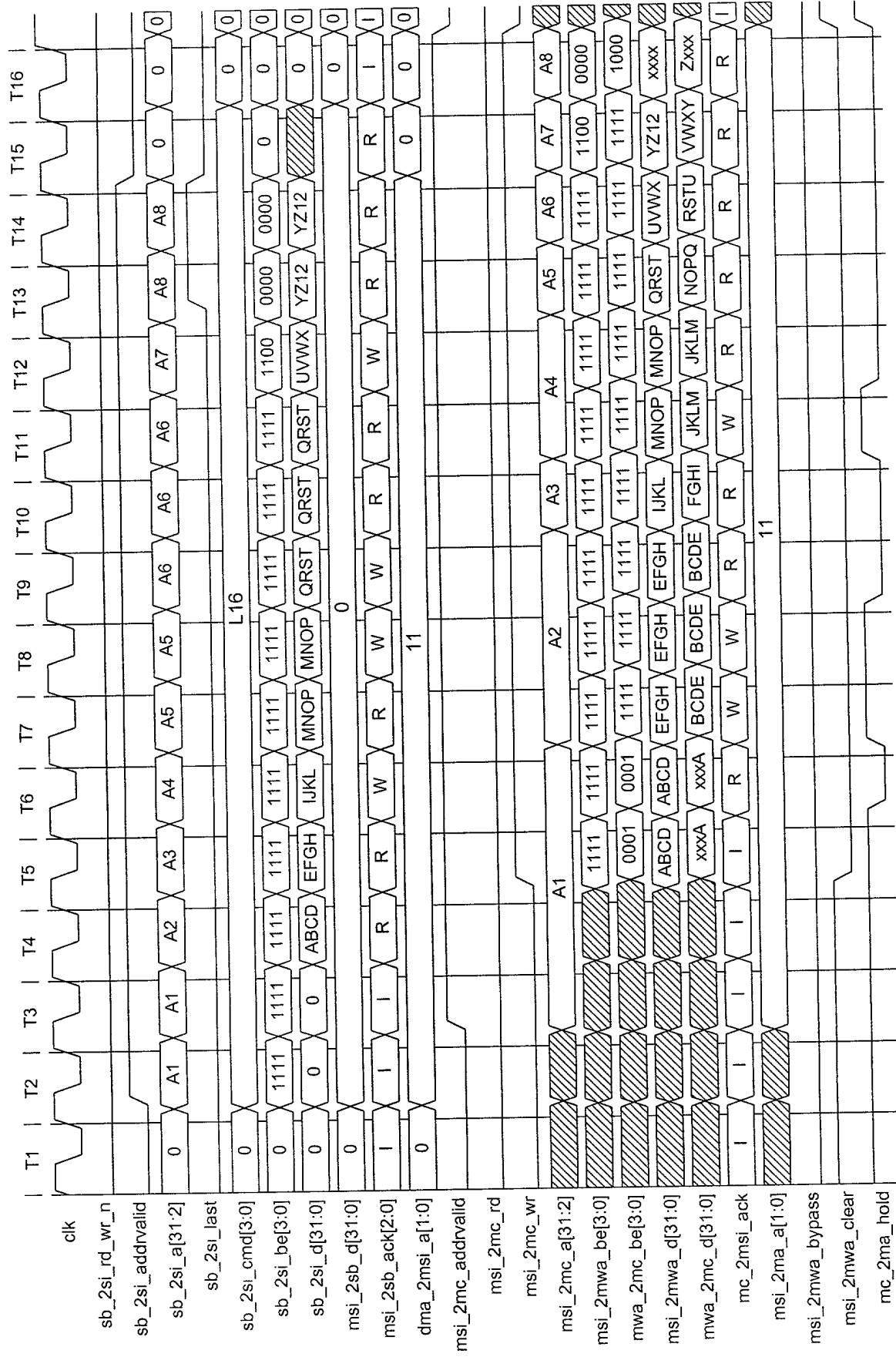
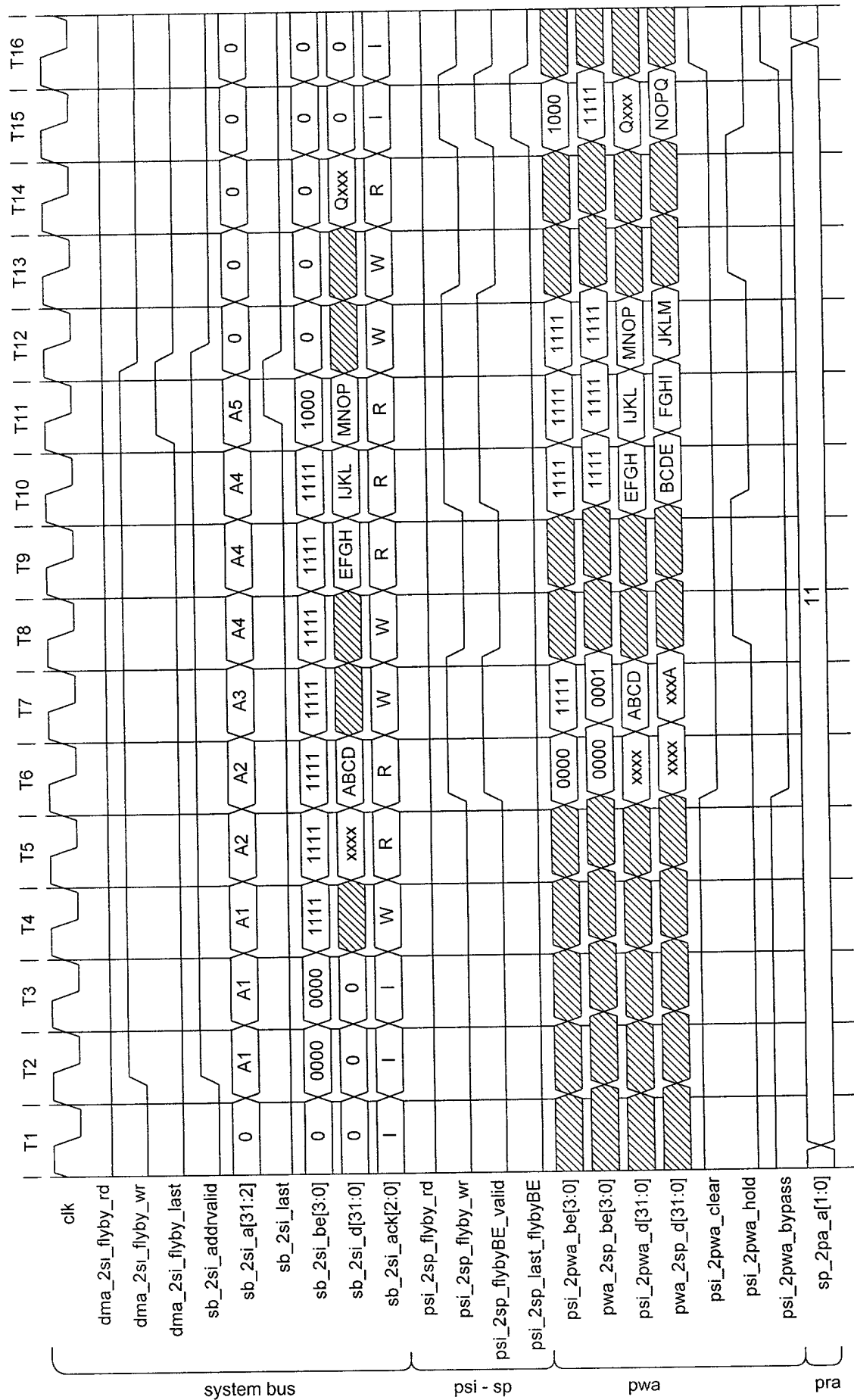


FIG. 9



FLY-BY READ (MEMORY CONTROL DEVICE 103)

FIG. 10



psi_2pra_hold = 0
psi_2pra_load = 0
psi_2pra_preload = 0
psi_2pra_bypass = 1
psi_2sb_d[31:0] = 0

FLY-BY WRITE (SLAVE PERIPHERAL DEVICE 102)

FIG. 11

DATA IN MAIN MEMORY 104

| ADDR | 00 | 01 | 10 | 11 |
|------|----|----|----|----|
| A1 | x | A | B | C |
| A2 | D | E | F | G |
| A3 | H | I | J | K |
| A4 | L | M | N | O |
| A5 | P | Q | x | x |
| A6 | x | x | x | x |

FIG. 12

DATA, ADDRESS AND BYTE-ENABLES ON SYSTEM BUS 105

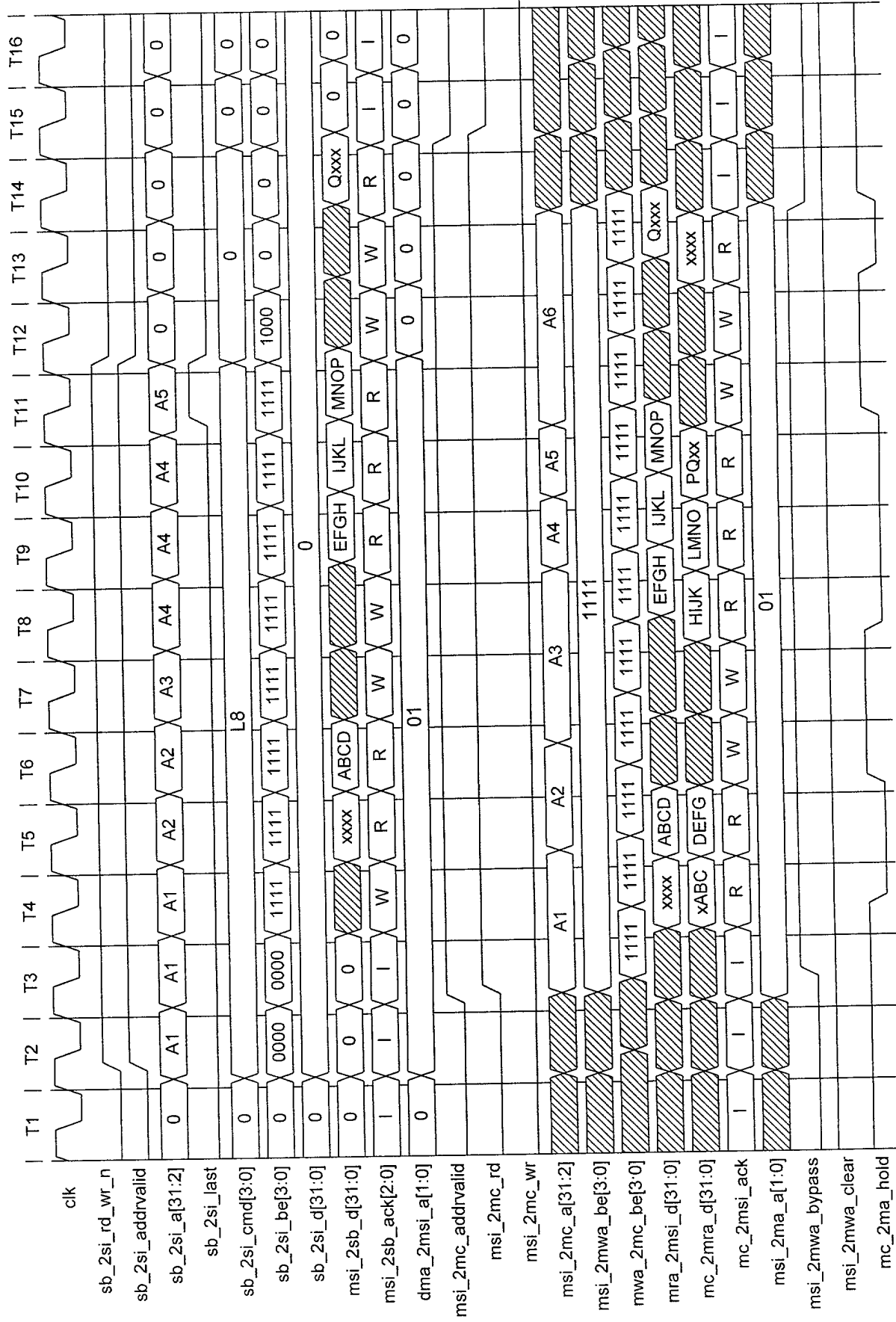
| ADDR | 00 | 01 | 10 | 11 | BE |
|------|----|----|----|----|------|
| A1 | x | x | x | x | 0000 |
| A1 | A | B | C | D | 1111 |
| A2 | E | F | G | H | 1111 |
| A3 | I | J | K | L | 1111 |
| A4 | M | N | O | P | 1111 |
| A5 | Q | x | x | x | 1000 |

FIG. 13

DATA AND BYTE ENABLES RECEIVED BY SLAVE PERIPHERAL 113

| 00 | 01 | 10 | 11 | BE |
|----|----|----|----|------|
| x | x | x | x | 0000 |
| x | x | x | A | 0001 |
| B | C | D | E | 1111 |
| F | G | H | I | 1111 |
| J | K | L | M | 1111 |
| N | O | P | Q | 1111 |

FIG. 14



FLY-BY WRITE (MEMORY CONTROL DEVICE 103)

FIG. 15